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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,307	04/11/2002	Jonathan Joseph Campbell	P67505US0	8634

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EXAMINER

BELLAMY, TAMIKO D

ART UNIT	PAPER NUMBER
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2856

DATE MAILED: 10/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/019,307

Applicant(s)

CAMPBELL ET AL.

Examiner

Tamiko D. Bellamy

Art Unit

2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5 and 9-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18-21 is/are allowed.
- 6) ☒ Claim(s) 1-3,5 and 9-12 is/are rejected.
- 7) ☒ Claim(s) 13-17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. Amendment dated 7/15/03 has been received and entered. Claims 4, and 6-8 have been canceled. Claims 1-3, 5, and 9-21 are currently pending.

Claim Objections

2. Claims 1, 3, 5, 10, and 11 objected to because of the following informalities:
 - a. Claim 1, lines 6-7, replace “ operating while in either made of moving and stationary” with --is moving or stationary --.Appropriate correction is required.
 - b. Claim 3, line 1, replace “2” with -- 1 --.
 - c. Claim 5, line 1, replace “4” with --1--.
 - d. Claim 10, line 1, replace “7” with --1--.
 - e. Claim 11, line 1, replace “9” with --1--.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 1 and 3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 1, the language “ while in either made of moving and stationary” is vague and unclear. Furthermore, the language “ sensing acoustic waves and

including transmitting signals representing the sensed mechanical waves". It is unclear as to whether acoustic waves or mechanical waves are sensed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5, and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer (4,237,454).

With respect to claim 1, Meyer discloses in figs. 2 and 3 a sensor (e.g., vibration sensor 14) located on the exterior surface of a machine (14). Meyer further discloses a transmitter (21) and a receiver (27) at a remote location (e.g., central station). As depicted in fig. 3, Meyer discloses that a data processor (microprocessor 29) is connected to the receiver (27) and a display means (30) (col. 4, lines 8-11). While, Meyer does not specifically disclose transmitting the signals for a predetermined time, the device of Meyer is inherently capable of transmitting a signal from a transmitter for a predetermined time. Meyer specifically states in col. 3, lines 47-50, that power is generated to run the detection circuitry continuously; however, if the power is stored, the transmitter operates occasionally. This teaching clearly infers and/or suggest transmitting at a predetermined period of time. Therefore, to employ Meyer on a transmitter sending signals for a predetermined time would have been obvious to one of ordinary skill in the

art at the time of the invention since this reference explicitly teaches it use on monitoring rotating equipment including a transmitter that can operate occasionally.

With respect to claim 2, Meyer discloses that the receiver (27) is at a central station.

With respect to claim 3, as depicted in fig. 2, Meyer discloses a self-powered power supply (e.g., piezo-ceramic element 22) for the sensor (19) located on the machine (14).

With respect to claim 5, Meyer discloses a demodulator (28) receives the modulated frequency of the received signal and presents the information to the processor (e.g., microprocessor 29) (col. 4, lines 6-15). Meyer also incorporates reference U.S. Pat. No. 3, 677, 072, which measures the peak values of the vibration signal obtained from the machine (col. 2, lines 67-68, col. 3, lines 1-5). The processor that Meyer uses is inherently capable of producing output signals representing a plurality of events within the machine (14) since the processor (e.g., microprocessor 29) contains memory.

With respect to claims 9 and 10, Meyer discloses a sensor (19). The device of Meyer further discloses the processor (e.g., microprocessor 29) includes a look-up table of the number of the monitor unit at the unit location (col. 4, lines 6-15). The processor (e.g., microprocessor 29) Meyer uses is a combination of a processor and a detector to determine the location of the sensor. With respect to the further limitations of claim 10, the processor (e.g., microprocessor 29) Meyer uses inherently includes a timing means to calculate the location of the sensor (19).

With respect to claim 11, Meyer discloses an accelerometer or other vibration sensor (19) (col. 3, lines 15).

With respect to claim 12, Meyer discloses a demodulator (28) receives the modulated frequency of the received signal and presents the information to the processor (e.g., microprocessor 29) (col. 4, lines 6-15). Meyer also incorporates reference U.S. Pat. No. 3, 677, 072, which measures the peak values of the vibration signal obtained from the machine (col. 2, lines 67-68, col. 3, lines 1-5). The device of Meyer further discloses the processor (e.g., microprocessor 29) includes a lookup table of the number of the monitor unit at the unit location (col. 4, lines 6-15). The processor (e.g., microprocessor 29) Meyer uses is a combination of a processor and a detector to determine the location of the sensor. While, Meyer does not specifically discloses recording data over a predetermined time, the device of Meyer is inherently capable of transmitting a signal from a transmitter for a predetermined time. Meyer specifically states in col. 3, lines 47-50, that power is generated to run the detection circuitry continuously; however, if the power is stored, the transmitter operates occasionally. This teaching clearly infers and/or suggest transmitting at a predetermined period of time. Therefore, to employ Meyer on a transmitter sending signals for a predetermined time would have been obvious to one of ordinary skill in the art at the time of the invention since this reference explicitly teaches it use on monitoring rotating equipment including a transmitter that can operate occasionally.

Allowable Subject Matter

5. Claims 18-21 are allowed.

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6. Claims 13-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments with respect to claims 1-3, and 13-18 have been considered but are moot in view of the new ground(s) of rejection. It is the examiners position that claims 1-3, 5 and 9-12 are not patentable over the newly applied art of Meyer.


Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamiko D. Bellamy whose telephone number is (703) 305-4971. The examiner can normally be reached on Monday through Friday 10:00 AM to 7:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (703) 305-4705. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Tamiko Bellamy
T-B.
September 30, 2003


HEZRON WILLIAMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800